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# **WATER SUPPLY OUTLOOK FOR COLORADO AND NEW MEXICO**

Prepared by  
**U. S. DEPARTMENT of AGRICULTURE ★ SOIL CONSERVATION SERVICE**

Collaborating with  
**COLORADO STATE UNIVERSITY EXPERIMENT STATION  
STATE ENGINEER of COLORADO  
and STATE ENGINEER of NEW MEXICO**

Data included in this report were obtained by the agencies named above in cooperation with the Bureau of Reclamation, U.S. Forest Service, National Park Service, Corps of Engineers and other Federal, State and private organizations.

AS OF  
**APR. 1, 1973**

## TO RECIPIENTS OF WATER SUPPLY OUTLOOK REPORTS:

Most of the usable water in western states originates as mountain snowfall. This snowfall accumulates during the winter and spring, several months before the snow melts and appears as streamflow. Since the runoff from precipitation as snow is delayed, estimates of snowmelt runoff can be made well in advance of its occurrence. Streamflow forecasts published in this report are based principally on measurement of the water equivalent of the mountain snowpack.

Forecasts become more accurate as more of the data affecting runoff are measured. All forecasts assume that climatic factors during the remainder of the snow accumulation and melt season will interact with a resultant average effect on runoff. Early season forecasts are therefore subject to a greater change than those made on later dates.

The snow course measurement is obtained by sampling snow depth and water equivalent at surveyed and marked locations in mountain areas. A total of about ten samples are taken at each location. The average of these are reported as snow depth and water equivalent. These measurements are repeated in the same location near the same dates each year.

Snow surveys are made monthly or semi-monthly from January 1 through June 1 in most states. There are about 1900 snow courses in Western United States and in the Columbia Basin in British Columbia. Networks of automatic snow water equivalent and related data sensing devices, along with radio telemetry are expanding and will provide a continuous record of snow water and other parameters at key locations.

Detailed data on snow course and soil moisture measurements are presented in state and local reports. Other data on reservoir storage, summaries of precipitation, current streamflow, and soil moisture conditions at valley elevations are also included. The report for Western United States presents a broad picture of water supply outlook conditions, including selected streamflow forecasts, summary of snow accumulation to date, and storage in larger reservoirs.

Snow survey and soil moisture data for the period of record are published by the Soil Conservation Service by states about every five years. Data for the current year is summarized in a West-wide basic data summary and published about October 1 of each year.

## PUBLISHED BY SOIL CONSERVATION SERVICE

The Soil Conservation Service publishes reports following the principal snow survey dates from January 1 through June 1 in cooperation with state water administrators, agricultural experiment stations and others. Copies of the reports for Western United States and all state reports may be obtained from Soil Conservation Service, Western Regional Technical Service Center, Room 209, 511 N. W. Broadway, Portland, Oregon 97209.

Copies of state and local reports may also be obtained from state offices of the Soil Conservation Service in the following states:

STATE	ADDRESS
Alaska	204 E. 5th. Ave., Room 217, Anchorage, Alaska 99501
Arizona	6029 Federal Building, Phoenix, Arizona 85025
Colorado (N. Mex.)	P. O. Box 17107, Denver, Colorado 80217
Idaho	Room 345, 304 N. 8th. St., Boise, Idaho 83702
Montana	P. O. Box 970, Bozeman, Montana 59715
Nevada	P. O. Box 4850, Reno Nevada 89505
Oregon	1218 S. W. Washington St., Portland, Oregon 97205
Utah	4012 Federal Bldg., 125 South State St., Salt Lake City, Utah 84111
Washington	360 U.S. Court House, Spokane, Washington 99201
Wyoming	P. O. Box 2440, Casper, Wyoming 82601

## PUBLISHED BY OTHER AGENCIES

Water Supply Outlook reports prepared by other agencies include a report for California by the Water Supply Forecast and Snow Surveys Unit, California Department of Water Resources, P. O. Box 388, Sacramento, California 95802 --- and for British Columbia by the Department of Lands, Forests and Water Resources, Water Resources Service, Parliament Building, Victoria, British Columbia





# **WATER SUPPLY OUTLOOK FOR COLORADO AND NEW MEXICO**

and  
FEDERAL - STATE - PRIVATE COOPERATIVE SNOW SURVEYS

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### WATERSHED II - ARKANSAS RIVER WATERSHED

Describes water supply conditions in Lake County, Upper Arkansas, Fremont, Custer County Divide, Fountain Valley, Black Squirrel, Horse-Rush Creek, Central Colorado, Turkey Creek, Pueblo, Bessemer, Olney Boone, Cheyenne, Upper Huerfano, Stonewall, Spanish Peaks, Purgatoire, Branson Trinchera, Western Baca, Southeastern Baca, Two Buttes, Bent, Timpas, Northeast Prowers, Prowers, Kiowa County, West Otero, East Otero, and Big Sandy Soil Conservation Districts.

### WATERSHED III - RIO GRANDE WATERSHED (COLORADO)

Describes water supply conditions in Rio Grande, Center, Conejos, Mosca Hooper, Mt. Blanca, Sanchez, and Culebra Soil Conservation Districts.

### WATERSHED IV - RIO GRANDE WATERSHED (NEW MEXICO)

Describes water supply conditions in Upper Chama, East Rio Arriba, Taos, Lindrith, Jemez, Santa Fe - Pojoaque, Sandoval, Tijeras, Cuba, and Edgewood Soil Conservation Districts.

### WATERSHED V - DOLORES, SAN JUAN, AND ANIMAS RIVERS WATERSHED

Describes water supply conditions in San Miguel Basin. Dove Creek, Dolores, Mancos, LaPlata, Pine River, San Juan, San Miguel Basin, and Glade Park Soil Conservation Districts.

### WATERSHED VI - GUNNISON RIVER WATERSHED

Describes water supply conditions in Delta, Gunnison, Cimarron, Shavano, and Uncompahgre Soil Conservation Districts.

### WATERSHED VII - COLORADO RIVER WATERSHED

Describes water supply conditions in DeBeque, Plateau Valley, Lower Grand Valley, Bookcliff, Eagle County, Middle Park, Glade Park, Upper Grand Valley, South Side, and Mt. Sopris Soil Conservation Districts.

### WATERSHED VIII - YAMPA, WHITE AND NORTH PLATTE RIVERS WATERSHED

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Describes water supply conditions in Sedgwick, South Platte, Haxton, Peetz, Padroni, Morgan, Rock Creek, and Yuma Soil Conservation Districts.

### APPENDIX I - SNOW SURVEY MEASUREMENTS

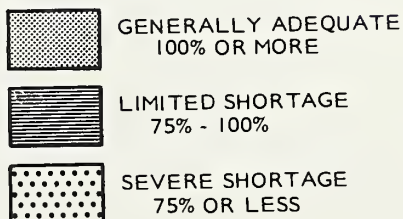
### APPENDIX II - SOIL MOISTURE MEASUREMENTS



# WATER SUPPLY OUTLOOK

as of

April 1, 1973



The map on this page indicates the most probable water supply as of the date of this report. Estimates assume average conditions of snow fall, precipitation and other factors from this date to the end of the forecast period. As the season progresses accuracy of estimates improve. In addition to expected streamflow, reservoir storage, soil moisture in irrigated areas, and other factors are considered in estimating water supply. Estimates apply to irrigated areas along the main streams and may not indicate conditions on small tributaries.

# WATER SUPPLY CONDITIONS

as of

April 1, 1973

CURRENT SNOWPACK SHOULD PROVIDE ADEQUATE WATER SUPPLIES IN BOTH STATES. THE LOWEST SNOW AREA IS IN THE SOUTH PLATTE DRAINAGE, BUT HERE RESERVOIR CARRY-OVER IS GOOD AND SHOULD PROVIDE NEARLY ADEQUATE SUPPLIES. THE RIO GRAND AND SAN JUAN BASINS IN COLORADO AND NEW MEXICO HAVE EXTREMELY HIGH SNOWPACKS. SOME HIGH WATER CAN BE EXPECTED IN THESE AREAS. SOIL MOISTURE IN BOTH STATES IS EXCELLENT, DUE TO THE LATE MARCH SNOW STORM.



THE SNOWPACK IN COLORADO IS IN THREE DISTINCT BELTS. THE SOUTH AND NORTH PLATTE HAVE ONLY 85 TO 95 PERCENT OF NORMAL SNOWPACK. THE CENTER BELT INCLUDES THE ARKANSAS AND GUNNISON DRAINAGES WHICH ARE IN SLIGHTLY BETTER CONDITION. HERE THE SNOWPACK IS ABOUT 115 PERCENT. THE RIO GRANDE AND SAN JUAN BASINS HAVE VERY HIGH SNOWPACKS APPROACHING 150 PERCENT OF THE 15 YEAR AVERAGE. STREAMFLOW FORECASTS GENERALLY FOLLOW THE SNOWPACK PERCENTAGES. THERE SHOULD BE VERY FEW WATER SHORTAGES THIS SUMMER. THE RIO GRANDE AND SAN JUAN CAN EXPECT SOME HIGH WATER.



THE RIO GRANDE HAS ONE OF THE HIGHEST SNOWPACKS ON RECORD. THE LATE MARCH - EARLY APRIL STORM ADDED CONSIDERABLE SNOW TO AN ALREADY BIG SNOWPACK. SOME SNOW COURSES INDICATE MORE SNOW THAN ANY TIME SINCE SNOW SURVEYS WERE STARTED IN 1937. THE SAN JUAN BASIN ALSO HAS A VERY HEAVY SNOWPACK. THE PECOS MAY FLOW AS MUCH AS ANY TIME SINCE 1958. SOIL MOISTURE IS REPORTED AS GOOD. RESERVOIR CARRY-OVER STORAGE IS EXCELLENT.





# STREAMFLOW FORECASTS (1000 Ac. Ft.) Apr-Sept

FORECAST POINT	FORECAST	% of Average	Average <sup>+</sup>
Big Thompson at Drake (1)	82	82	100
Boulder at Orodel	40	82	49
Cache La Poudre at Canyon Mouth (2)	200	93	215
Clear Creek at Golden (3)	95	80	119
St. Vrain at Lyons (4)	55	79	70

# WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period	
	Spring Season	Late Season
Bear Creek	Exc	Avg
Coal Creek	Exc	Avg
North Fork of South Platte	Exc	Avg
North Fork of Cache La Poudre	Exc	Avg
Ralston Creek	Exc	Avg
Rock Creek	Exc	Avg

(1) Observed flow plus by-pass to power plants. (2) Observed flow minus trans-basin diversions plus municipal and irrigation diversions. (3) Observed flow minus diversion through August P. Gumlick Tunnel. (4) Observed flow plus change in storage in Price Reservoir.

## SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF	
		Last Year	Average <sup>+</sup>
Big Thompson	5	83	81
Boulder	3	81	80
Cache La Poudre	8	115	106
Clear Creek	6	89	77
Saint Vrain	3	80	73
South Platte	3	75	86

## SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF:	
		Last Year	Average <sup>+</sup>
Big Thompson	2	74	96
Boulder	1	86	91
Cache La Poudre	2	86	106
Clear Creek	2	90	102
Saint Vrain	2	77	93
South Platte	2	80	100

## RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage		
		This Year	Last Year	Average <sup>+</sup>
Antero	33.0	15.9	15.9	10.6
Barr Lake	32.2	25.9	28.0	21.1
Black Hollow	8.0	4.4	4.7	3.3
Boyd Lake	44.0	37.5	36.4	27.6
Cache La Poudre	9.5	8.1	8.0	7.5
Carter Lake	108.9	100.2	107.5	81.7
Chambers Lake	8.8	4.7	1.9	3.0
Cheesman	79.0	39.4	79.0	49.0
Cobb Lake	34.3	20.9	20.3	9.9
Eleven Mile	97.8	91.8	78.0	72.1
Fossil Creek	11.6	9.5	8.8	7.0
Gross	43.1	20.7	25.2	22.4

## RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage		
		This Year	Last Year	Average <sup>+</sup>
Halligan	6.4	6.4	6.4	4.7
Horsetooth	143.5	105.7	122.9	106.8
Lake Loveland	14.3	9.1	12.2	8.4
Lone Tree	9.2	9.0	7.8	6.6
Mariano	5.4	5.6	5.2	4.2
Marshall	10.3	4.0	6.0	3.0
Marston	18.0	15.6	15.5	14.7
Milton	24.4	16.7	17.8	10.8
Standley	42.0	24.7	30.3	11.0
Terry Lake	8.2	6.3	5.8	5.0
Union	12.7	10.9	12.1	7.6
Windsor	18.6	14.0	13.7	9.9

1953-1967 period.

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# WATER SUPPLY OUTLOOK FOR THE SOIL CONSERVATION DISTRICTS IN THE ARKANSAS RIVER WATERSHED IN COLORADO

as of

April 1, 1973

**U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE**  
CSU EXPERIMENT STATION, STATE ENGINEERS OF COLORADO AND NEW MEXICO



THE SNOWPACK INCREASED CONSIDERABLY THIS MONTH SO STREAMFLOW FORECASTS REFLECT THIS INCREASE AND ARE NOW ABOUT THE 1953-67 AVERAGE. THE STORM AT THE END OF THE MONTH CONTINUED INTO APRIL SO SOME OF THE SNOW WATER IS NOT INCLUDED IN THE MEASUREMENTS. RESERVOIR STORAGE IS 90 PERCENT OF AVERAGE ON ALL RESERVOIRS EXCEPT JOHN MARTIN AND TURQUOISE, WHICH HAVE 20,400 ACRE FEET AND 26,300 ACRE FEET RESPECTIVELY, SLIGHTLY LESS THAN LAST YEAR. WATER SUPPLIES SHOULD BE ADEQUATE AS AVERAGE PRECIPITATION CONTINUES DURING THE SEASON.

This report prepared by

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*The Conservation of Water begins with the Snow Survey*



# STREAMFLOW FORECASTS (1000 Ac. Ft.) Apr-Sept

FORECAST POINT	FORECAST	% of Average	Average <sup>+</sup>
Arkansas nr Pueblo (1)	350	117	298
Arkansas at Salida (1)	350	113	309
Cucharas nr LaVeta	20	167	12
Purgatoire at Trinidad	50	109	46

# WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period	
	Spring Season	Late Season
Apishapa	Exc	Avg
Fountain Creek	Exc	Avg
Grape	Exc	Avg
Hardscrable Creek	Exc	Avg
Huerfano	Exc	Avg
Monument Creek	Exc	Avg

(1) Observed flow plus change in Clear Creek, Twin Lakes and Turquoise Reservoirs minus diversions through Busk Ivanhoe, Boustead, Divide, Twin Lakes and Homestake Tunnels and Ewing, Front Pass, Wurtz and Columbine ditches.

## SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF	
		Last Year	Average <sup>+</sup>
Arkansas	10	106	100
Cucharas	2	606	190
Purgatoire	1	273	131

## SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF:	
		Last Year	Average <sup>+</sup>
Arkansas	3	126	114
Cucharas and Purgatoire	1	113	99

## RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage		
		This Year	Last Year	Average <sup>+</sup>
Adobe	61.6	0.0	13.3	11.1
Clear Creek	11.4	6.2	5.7	7.3
Cucharas	40.0	0.0	---	3.3
Great Plains	150.0	34.2	44.0	38.3
Horse Creek	26.9	0.0	0.0	4.9

## RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage		
		This Year	Last Year	Average <sup>+</sup>
John Martin	353.9	20.4	25.4	89.4
Meredith	41.9	22.1	7.8	10.0
Model	15.0	---	---	3.1
Turquoise	130.0	49.7	59.0	---
Twin Lakes	57.9	26.3	31.4	19.9

+ 1953-1967 period.

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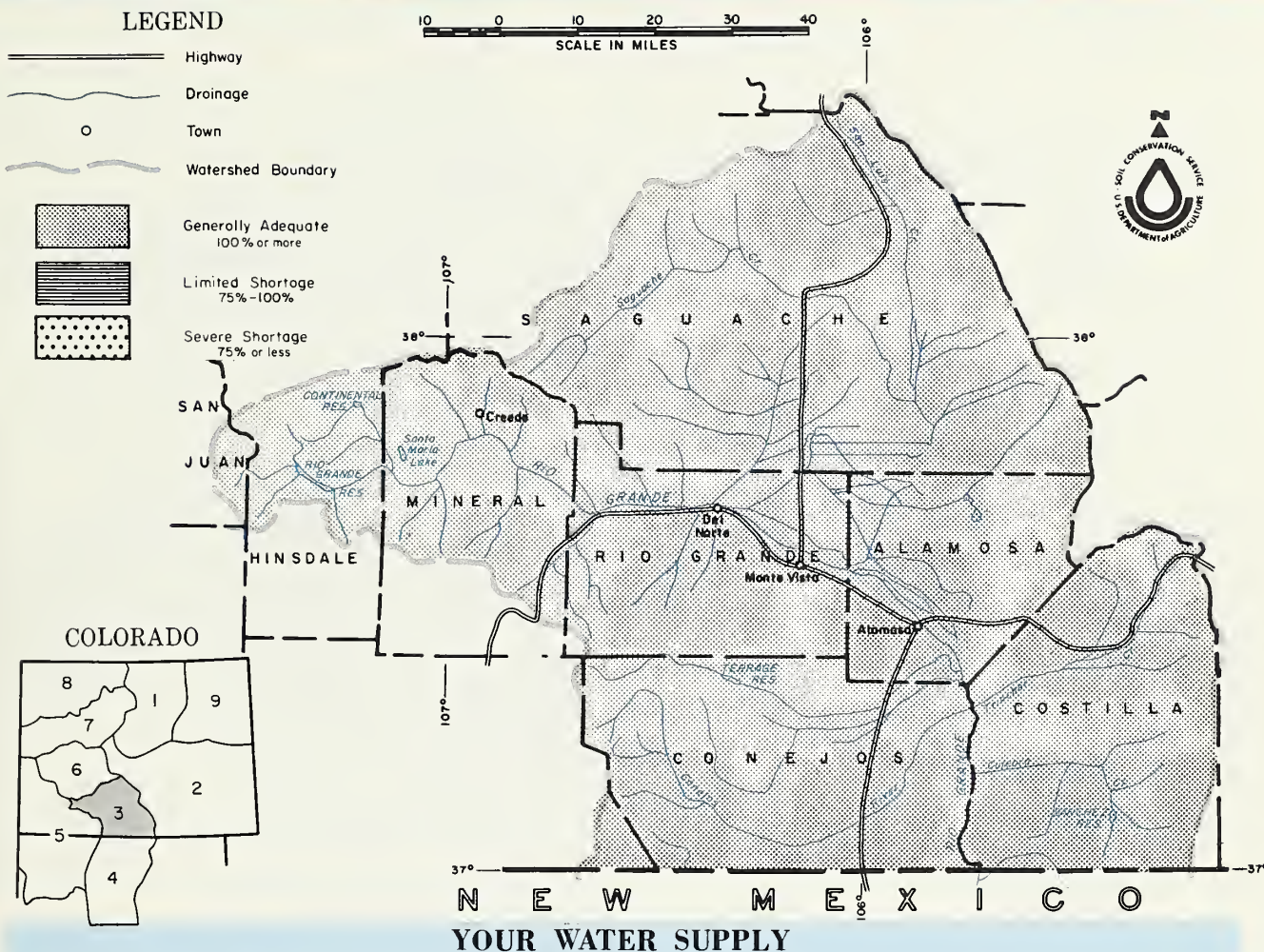


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# WATER SUPPLY OUTLOOK FOR THE SOIL CONSERVATION DISTRICTS IN THE UPPER RIO GRANDE WATERSHED IN COLORADO

as of  
April 1, 1973

**U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE**  
CSU EXPERIMENT STATION, STATE ENGINEERS OF COLORADO AND NEW MEXICO



THE SNOWPACK ON THE RIO GRANDE DRAINAGE CONTINUES TO BUILD AT A RAPID RATE. MOST OF THE SNOW COURSES IN THIS AREA ARE INDICATING 150 PERCENT OR HIGHER SNOWFALL. FORECASTS WERE RAISED CORRESPONDINGLY. MOST OF THE FORECASTS ARE NOW ABOVE 150 PERCENT OF THE 15 YEAR AVERAGE. HIGH WATER CAN BE EXPECTED IN MOST AREAS. IF THE SNOWPACK CONTINUES TO INCREASE, EARLY STREAMFLOW COULD BE EXTREMELY HIGH. SOILS IN THE IRRIGATED AREAS ARE WET.

This report prepared by

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Issued by

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DENVER, COLORADO      OURANGO, COLORADO

*The Conservation of Water begins with the Snow Survey*



# STREAMFLOW FORECASTS (1000 Ac. Ft.) Apr-Sept

FORECAST POINT	FORECAST	% of Average	Average +
Alamosa abv Terrace	90	145	62
Conejos nr Mogote (1)	252	138	182
Culebra at San Luis (2)	35	184	19
Rio Gr. at 30 Mile Bridge (3)	170	145	117
Rio Gr. nr Del Norte(3)	650	148	438
South Fork at South Fork	165	150	110

(1) Observed flow plus change in storage in Platoro Reservoir. (2) Observed flow plus change in storage in Sanchez Reservoir. (3) Observed flow plus change in storage in Santa Maria, Rio Grande and Continental Reservoirs.

# WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period	
	Spring Season	Late Season
Saguache Creek	Exc	Avg
Sangre de Cristo Cr.	Exc	Avg
Trinchera	Exc	Avg

## SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF	
		Last Year	Average +
Alamosa	2	212	161
Conejos	3	342	146
Culebra	2	294	182
Rio Grande	10	191	143

## SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF:	
		Last Year	Average +
Alamosa	1	86	132
Conejos	1	89	80
Culebra	1	113	99
Rio Grande	2	102	109

## RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage		
		This Year	Last Year	Average +
Continental	26.7	5.6	6.2	5.1
Platoro	60.0	2.9	2.9	7.1
Rio Grande	45.8	20.3	18.1	13.3

## RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage		
		This Year	Last Year	Average +
Sanchez	103.2	5.8	10.0	11.1
Santa Maria	45.0	5.1	6.6	6.0
Terrace	17.7	6.5	6.3	4.0

+ 1953-1967 period.

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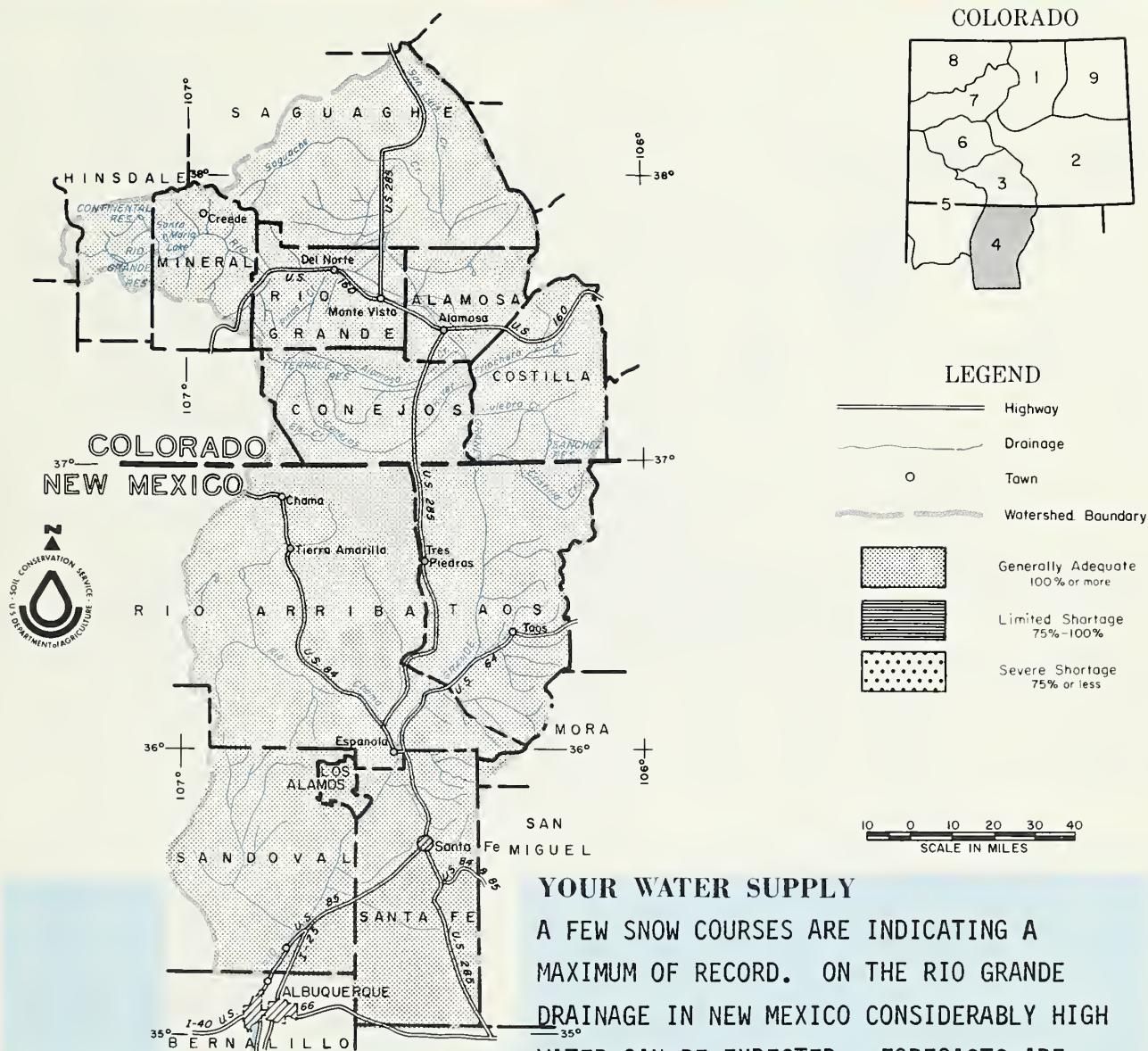


# WATER SUPPLY OUTLOOK FOR THE SOIL CONSERVATION DISTRICTS IN THE RIO GRANDE WATERSHED IN NEW MEXICO

as of

April 1, 1973

**U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE**  
CSU EXPERIMENT STATION, STATE ENGINEERS OF COLORADO AND NEW MEXICO



GENERALLY IN THE 150 PERCENT TO 175 PERCENT RANGE, HOWEVER, SEVERAL INCLUDING THE PECOS ARE AS HIGH AS 200 PERCENT OF THE 1953-67 AVERAGE. IF THE SNOWPACK CONTINUES TO INCREASE, SOME FLOODING WILL OCCUR. SOIL MOISTURE IS GOOD. THE FIRST OF APRIL STORM LEFT CONSIDERABLE SNOW AT THE LOW ELEVATIONS.

This report prepared by

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*The Conservation of Water begins with the Snow Survey*

# STREAMFLOW FORECASTS (1000 Ac. Ft.) Mar-Jul

FORECAST POINT	FORECAST	% of Average	Average <sup>†</sup>
Costilla at Cost. (1)	32	178	18
Pecos at Pecos	87	212	41
Rio Chama at El Vado	290	154	188
Rio Gr. at Otowi (2)	850	166	513
Rio Gr. at San Mar (2)	660	198	334
Rio Hondo nr Valdez	25	167	15
Red R. at Mouth nr Questa	50	156	32
	102		

The forecast of the Rio Grande at San Marcial is % of the Average used by the Elephant Butte Irrigation District. (1) Observed flow plus change in Costilla Reservoir. (2) Observed flow plus change in storage in El Vado and Abiquiu Reservoir.

## SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF	
		Last Year	Average <sup>†</sup>
Pecos	1	---	530
Rio Chama	4	563	186
Rio Grande, N.M.	11	1010	247
Rio Hondo	1	260	---
Red River	2	628	174

# WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period	
	Spring Season	Late Season
Embudo Creek	Exc	Avg
Jemez River	Exc	Avg
Mora River	Exc	Avg
Nambe Creek	Exc	Avg
Rio Ojo Caliente	Exc	Avg
Rio Pueblo de Taos	Exc	Avg
Santa Fe Creek	Exc	Avg

## SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF:	
		Last Year	Average <sup>†</sup>
Pecos	-	--	---
Rio Chama	1	96	109
Rio Grande	-	--	---
Red River	-	--	---

## RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage		
		This Year	Last Year	Average <sup>†</sup>
Alamogordo	111	90	45	64
Caballo	344	84	35	65
Conchas	273	145	78	161
Elephant Butte	2195	373	204	334

## RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage		
		This Year	Last Year	Average <sup>†</sup>
El Vado	195	38	2	6
McMillen-Avalon	32	30	9	22

+ 1953-1967 period.

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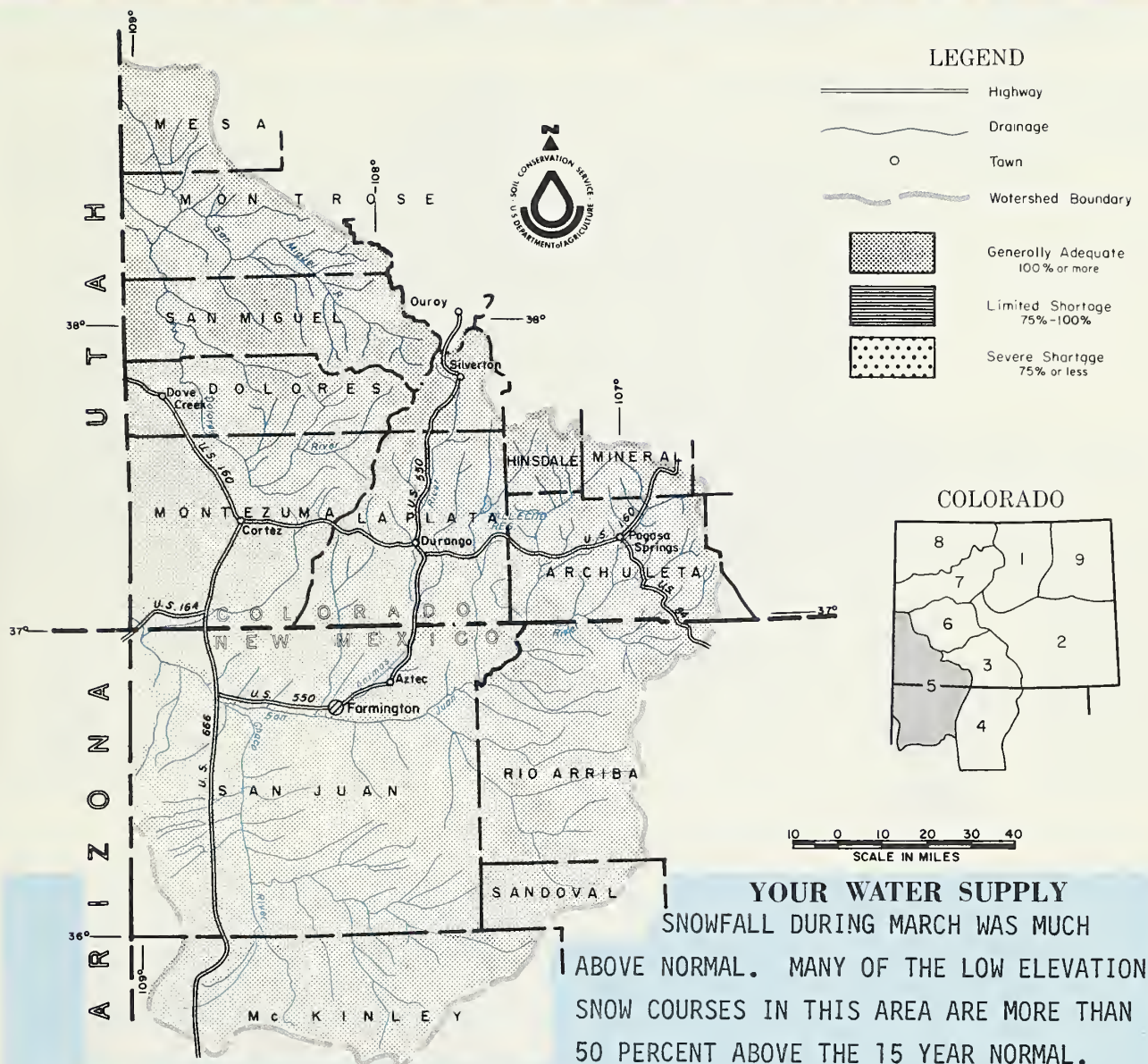
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# WATER SUPPLY OUTLOOK FOR THE SOIL CONSERVATION DISTRICTS IN THE SAN MIGUEL, DOLORES, ANIMAS, AND SAN JUAN WATERSHEDS IN COLORADO AND NEW MEXICO

April<sup>as</sup> of  
1, 1973

**U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE**  
COLORADO EXPERIMENT STATION, STATE ENGINEERS OF COLORADO AND NEW MEXICO



**YOUR WATER SUPPLY**  
SNOWFALL DURING MARCH WAS MUCH  
ABOVE NORMAL. MANY OF THE LOW ELEVATION  
SNOW COURSES IN THIS AREA ARE MORE THAN  
50 PERCENT ABOVE THE 15 YEAR NORMAL.

SNOW ON THE DOLORES WATERSHED AS A WHOLE IS 163 PERCENT OF THE 15 YEAR  
AVERAGE. STREAMFLOW FORECASTS HAVE BEEN INCREASED IN SOME CASES AS MUCH AS  
30 PERCENT. MOST OF THE LOW AREAS CAN EXPECT HIGH WATER AS THE SNOWMELT  
STARTS. THERE WILL BE NO WATER SHORTAGE. SOILS IN THE VALLEYS ARE WET.

This report prepared by

JACK N. WASHICHEK and RONALD E. MORELAND  
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Issued by

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*The Conservation of Water begins with the Snow Survey*



# STREAMFLOW FORECASTS (1000 Ac. Ft.) Apr-Sept

# WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

FORECAST POINT	FORECAST	% of Average	Average †
Animas at Durango	570	142	409
Dolores at Dolores	335	145	231
La Plata at Hesperus	37	154	24
Los Pinos at Bayfield (1)	290	150	194
Piedra Cr. at Piedra	245	150	163
San Juan at Carracas	575	152	379
Inflow to Navajo Res. (1) (Apr-Jul)	950	153	619

STREAM or AREA	Flow Period	
	Spring Season	Late Season
Florida	Exc	Exc
Mancos	Exc	Exc
San Miguel	Exc	Exc

(1) Observed flow plus change in storage in Vallecito Reservoir.

## SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF	
		Last Year	Average †
Animas	6	202	141
Dolores	4	302	163
San Juan	5	243	141

## SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF:	
		Last Year	Average †
Animas	3	114	97
Dolores	2	72	73
San Juan	1	96	76

## RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage		
		This Year	Last Year	Average †
Groundhog	22	7	10	7
Lemon	40	21	22	15
Navajo	1696	960	838	--
Vallecito	126	73	60	50
Narraguinnep		17		
Jackson Gulch	10	5	5	4

## RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage		
		This Year	Last Year	Average †

† 1953-1967 period.

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# WATER SUPPLY OUTLOOK FOR THE SOIL CONSERVATION DISTRICTS IN THE GUNNISON RIVER WATERSHED IN COLORADO

as of

April 1, 1973

**U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE**  
COLORADO EXPERIMENT STATION, STATE ENGINEERS OF COLORADO AND NEW MEXICO



STREAMFLOW FORECASTS WERE INCREASED ON THE UNCOMPAHGRE RIVER AND SURFACE CREEK TO ABOUT 125 PERCENT OF THE 1953-67 AVERAGE. OTHER GUNNISON RIVER FORECASTS ARE THE SAME AS LAST MONTH RANGING FROM 2 TO 19 PERCENT ABOVE AVERAGE. SOIL MOISTURE CONDITIONS IN THE MOUNTAIN AREAS ARE ABOVE AVERAGE. RESERVOIR STORAGE IN BLUE MESA AND MORROW POINT IS SIMILAR TO LAST YEAR WHILE TAYLOR RESERVOIR CONTAINS 41,000 ACRE FEET COMPARED TO 70,000 ACRE FEET LAST YEAR.

This report prepared by

JACK N. WASHICHEK and RONALD E. MORELAND  
SNOW SURVEY UNIT, SOIL CONSERVATION SERVICE  
DENVER, COLORADO

Issued by

M. D. BURDICK—STATE CONSERVATIONIST R. L. PORTER—AREA CONSERVATIONIST  
U. S. DEPARTMENT OF AGRICULTURE - SOIL CONSERVATION SERVICE  
DENVER, COLORADO GLENWOOD SPRINGS, COLORADO

*The Conservation of Water begins with the Snow Survey*

# STREAMFLOW FORECASTS (1000 Ac. Ft.) Apr-Sept

FORECAST POINT	FORECAST	% of Average	Average <sup>+</sup>
Gunnison Inflow to Blue Mesa (1)	785	102	767
Gunnison nr Grand Junction (2)	1350	119	1137
N. Fork of Gunnison(3)	300	117	257
Surface Cr. nr Cedaridge	20	125	16
Uncompahgre at Colona	165	128	129

(1) Observed flow plus change in storage in Taylor Reservoir. (2) Observed flow plus change in storage in Blue Mesa, Morrow Point and Taylor Reservoirs. (3) Observed flow plus change in storage in Paonia Reservoir.

## SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF	
		Last Year	Average <sup>+</sup>
Gunnison	12	134	112
Surface Creek	3	148	119
Uncompahgre	3	172	117

# WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period	
	Spring Season	Late Season
Taylor	Exc	Fair

## SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF:	
		Last Year	Average <sup>+</sup>
Gunnison	1	110	121
Surface Creek	1	124	121
Uncompahgre	1	124	121

## RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage		
		This Year	Last Year	Average <sup>+</sup>
Blue Mesa	830	308	321	--
Morrow Point	121	115	116	--
Taylor	106	41	70	58

## RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage		
		This Year	Last Year	Average <sup>+</sup>

+ 1953-1967 period.

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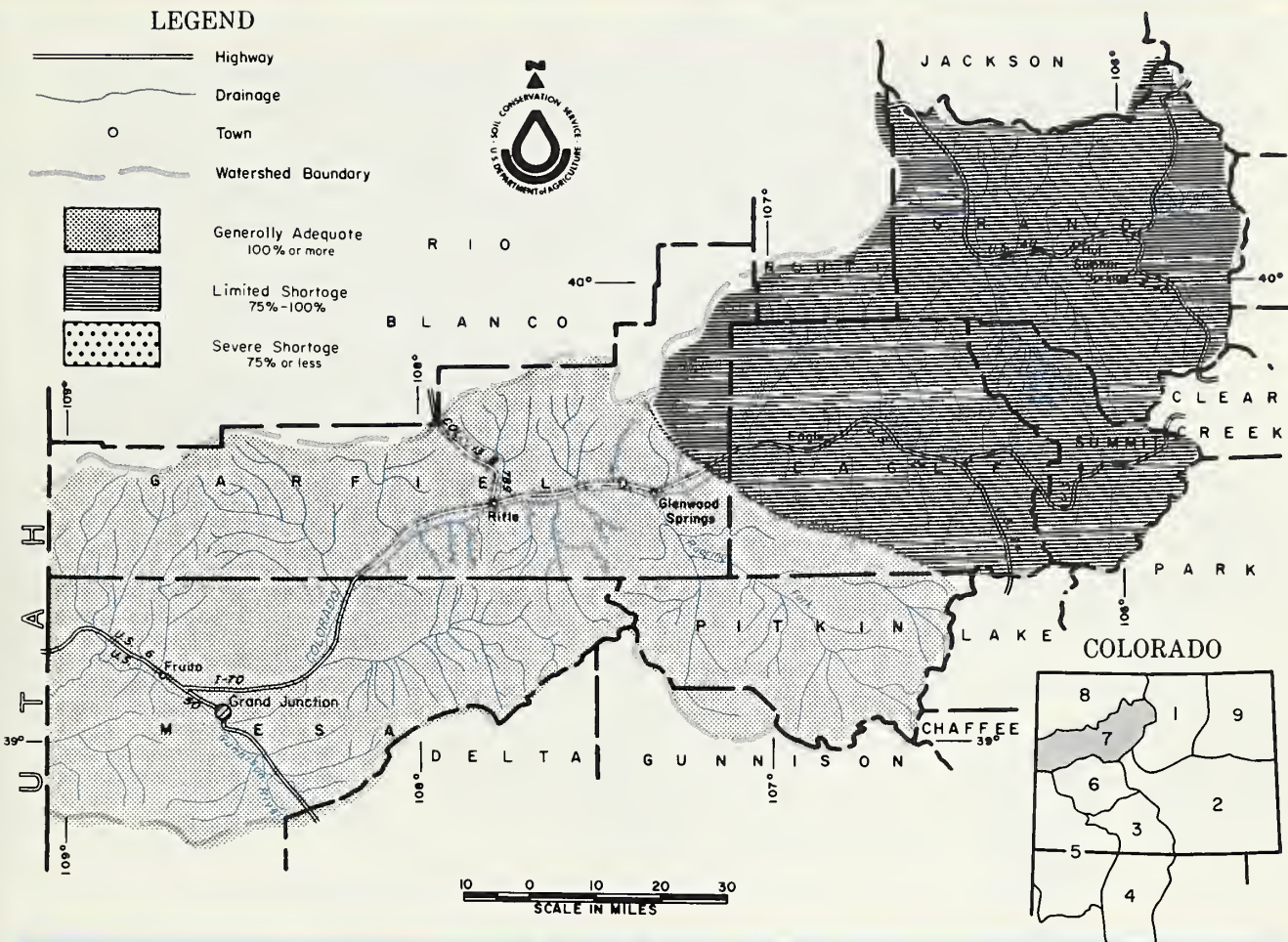
# WATER SUPPLY OUTLOOK FOR THE SOIL CONSERVATION DISTRICTS IN THE COLORADO RIVER WATERSHED IN COLORADO

as of  
April 1, 1973

**U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE**  
COLORADO EXPERIMENT STATION, STATE ENGINEERS OF COLORADO AND NEW MEXICO

## LEGEND

-  Highway
-  Drainage
-  Town
-  Watershed Boundary
-  Generally Adequate  
100% or more
-  Limited Shortage  
75%-100%
-  Severe Shortage  
75% or less



## YOUR WATER SUPPLY

THE SNOWPACK ON THE COLORADO DRAINAGE REMAINS NEAR THE NORMAL MARK. THE LOWEST SNOW IS ON THE BLUE RIVER WITH 80 PERCENT OF NORMAL AND 140 PERCENT ON THE GRAND MESA. OUTLOOK FOR SUMMER FLOWS GREATLY IMPROVED ON THE STREAMS FED BY THE GRAND MESA. OTHER FORECASTS REMAINED SIMILAR TO MARCH 1 AND NEAR THE 1953-67 AVERAGE. WATER SUPPLIES SHOULD BE GENERALLY ADEQUATE THIS SUMMER OVER THE COLORADO BASIN. SOIL MOISTURE CONDITIONS IN THE VALLEY ARE REPORTED AS GOOD.

*This report prepared by*

JACK N. WASHICHEK and RONALD E. MORELAND  
SNOW SURVEY UNIT, SOIL CONSERVATION SERVICE  
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*Issued by*

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R. L. PORTER  
AREA CONSERVATIONIST  
GLENWOOD SPRINGS, COLORADO

*The Conservation of Water begins with the Snow Survey*

# STREAMFLOW FORECASTS (1000 Ac. Ft.) Apr-Sept

# WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

FORECAST POINT	FORECAST	% of Average	Average +
Blue inflow to Dillon	125	82	153
Blue ab Green Mt. (1)	195	82	236
Colo. Rv. inflow to Granby Res. (2)	200	91	219
Colo. Rv. nr Dotsero (3)	1400	102	1375
Roaring Fork at Glenwood Springs (4)	725	105	692
Wm. Fk nr Par. (5)	55	92	60
Willow Cr. inflow to Willow Cr. Res.	42	91	46
Colo. nr Cameo (6)	2250	99	2216

STREAM or AREA	Flow Period	
	Spring Season	Late Season
Brush	Avg	Fair
Eagle River	Avg	Fair
Gypsum Creek	Avg	Fair

(1) Observed flow plus diversions through Roberts Tunnel and change in storage in Dillon Reservoir. (2) Observed flow corrected for change in storage in Lake Granby as furnished by U.S.B.R. and diversions by Adams Tunnel and Grand River Ditch. (3) Observed flow plus the changes as indicated in (1), (2) and (5) plus Moffat Ditch and change in Homestake, Williams Fork, Green Mt. and Willow Creek Reservoirs. (4) Observed flow plus diversions through Divide and Twin Lakes Tunnels plus change in storage in Ruedi Reservoir. (5) Observed flow plus diversions through August P. Gumlick Tunnel. (6) Observed flow plus the changes as indicated in (3) and (4).

## SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF:	
		Last Year	Average +
Blue River	8	80	81
Colorado	21	87	90
Plateau	3	140	116
Roaring Fork	7	121	104
Williams Fork	2	106	101
Willow	2	84	77

## SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF:	
		Last Year	Average +
Blue River	1	88	92
Colorado	5	108	110
Roaring Fork	1	133	117
Willow	1	94	108

## RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage		
		This Year	Last Year	Average +
Dillon	254	219	236	233
Granby	466	319	316	233
Green Mountain	147	66	63	63
Homestake	43	17	10	---

## RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage		
		This Year	Last Year	Average +
Ruedi	101	55	62	--
Williams Fork	97	53	52	27
Willow Creek	9	8	8	6
Vega	32	--	16	11

+ 1953-1967 period.

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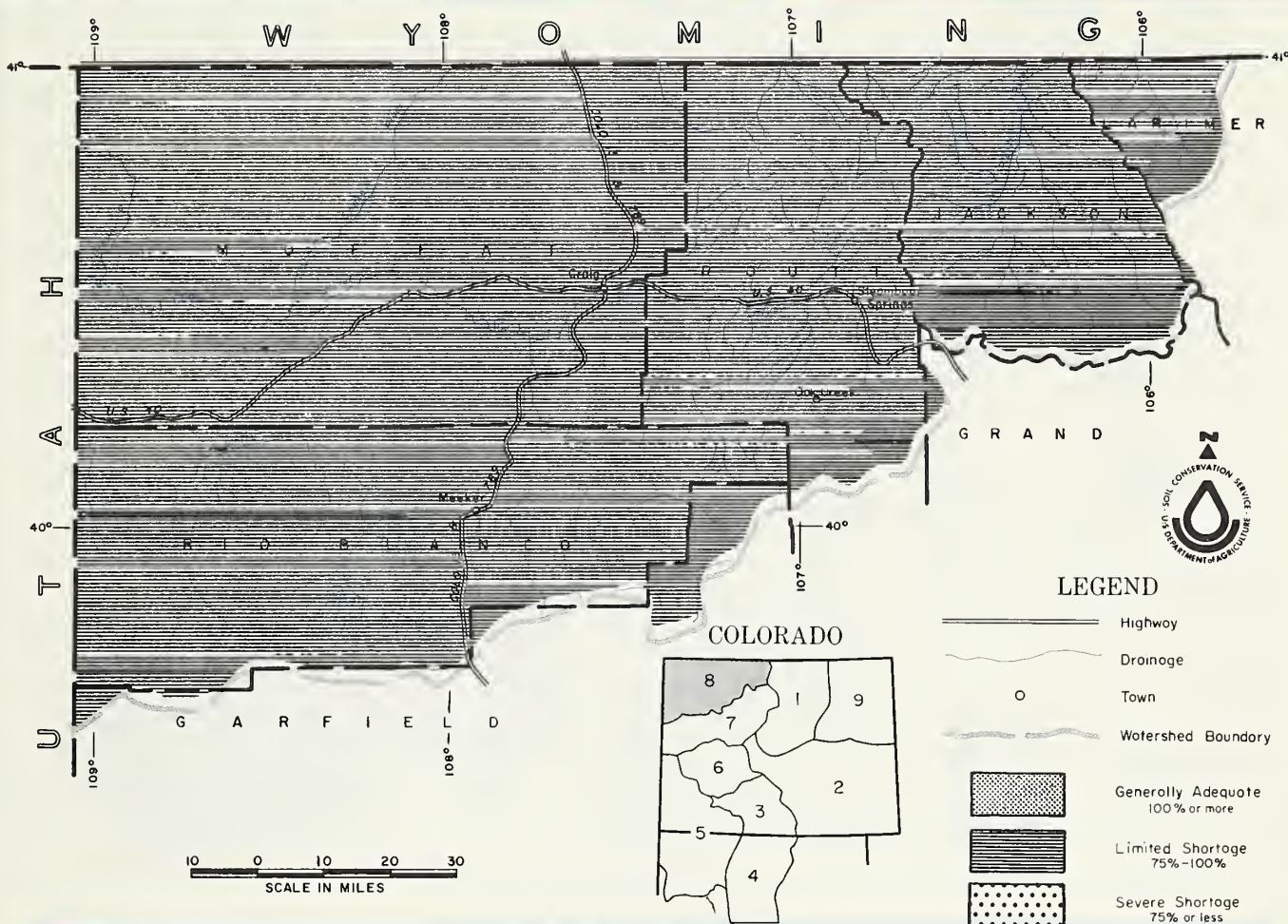
"The Conservation of Water begins with the Snow Survey"



# WATER SUPPLY OUTLOOK FOR THE SOIL CONSERVATION DISTRICTS IN THE YAMPA, WHITE, AND NORTH PLATTE RIVER WATERSHEDS IN COLORADO

as of  
April 1, 1973

**U. S. DEPARTMENT OF AGRICULTURE - SOIL CONSERVATION SERVICE**  
COLORADO EXPERIMENT STATION, STATE ENGINEERS OF COLORADO AND NEW MEXICO



## YOUR WATER SUPPLY

SNOWFALL WAS AT JUST ABOUT A NORMAL RATE DURING MARCH OVER THE ENTIRE AREA. MOST OF THE BASINS INDICATE ABOUT 95 PERCENT OF THE 15 YEAR AVERAGE. SUMMER STREAMFLOW SHOULD BE NEAR NORMAL. IF THE REMAINDER OF THE SEASON SNOWFALL IS NEAR NORMAL, THERE SHOULD BE NO WATER SHORTAGES IN THE AREA. SOIL MOISTURE IS REPORTED AS GOOD.

This report prepared by

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DENVER, COLORADO

Issued by

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DENVER, COLORADO GLENWOOD SPRINGS, COLORADO

*The Conservation of Water begins with the Snow Survey*



# STREAMFLOW FORECASTS (1000 Ac. Ft.) Apr-Sept

FORECAST POINT	FORECAST	% of Average	Average <sup>+</sup>
Elk at Clark	175	92	191
Laramie at Jelm	119	101	61
Little Snake at Lily	250	90	277
No. Platte at Northgate	208	97	215
White nr Meeker	278	95	293
Yampa nr Maybell	800	94	853
Yampa at Steamboat Springs	250	96	260

# WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period	
	Spring Season	Late Season
Canadian River	Avg	Avg
Hunt Creek	Avg	Avg
Illinois River	Avg	Avg
Michigan River	Avg	Avg
Oak Creek	Avg	Avg
Trout Creek	Avg	Avg

# SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF	
		Last Year	Average <sup>+</sup>
Elk	3	97	92
Laramie	3	100	97
North Platte	5	100	94
White	2	120	96
Yampa	6	93	90

# SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF:	
		Last Year	Average <sup>+</sup>
Laramie	2	86	106
North Platte	2	91	114
Yampa	1	90	156

+ 1953-1967 period.

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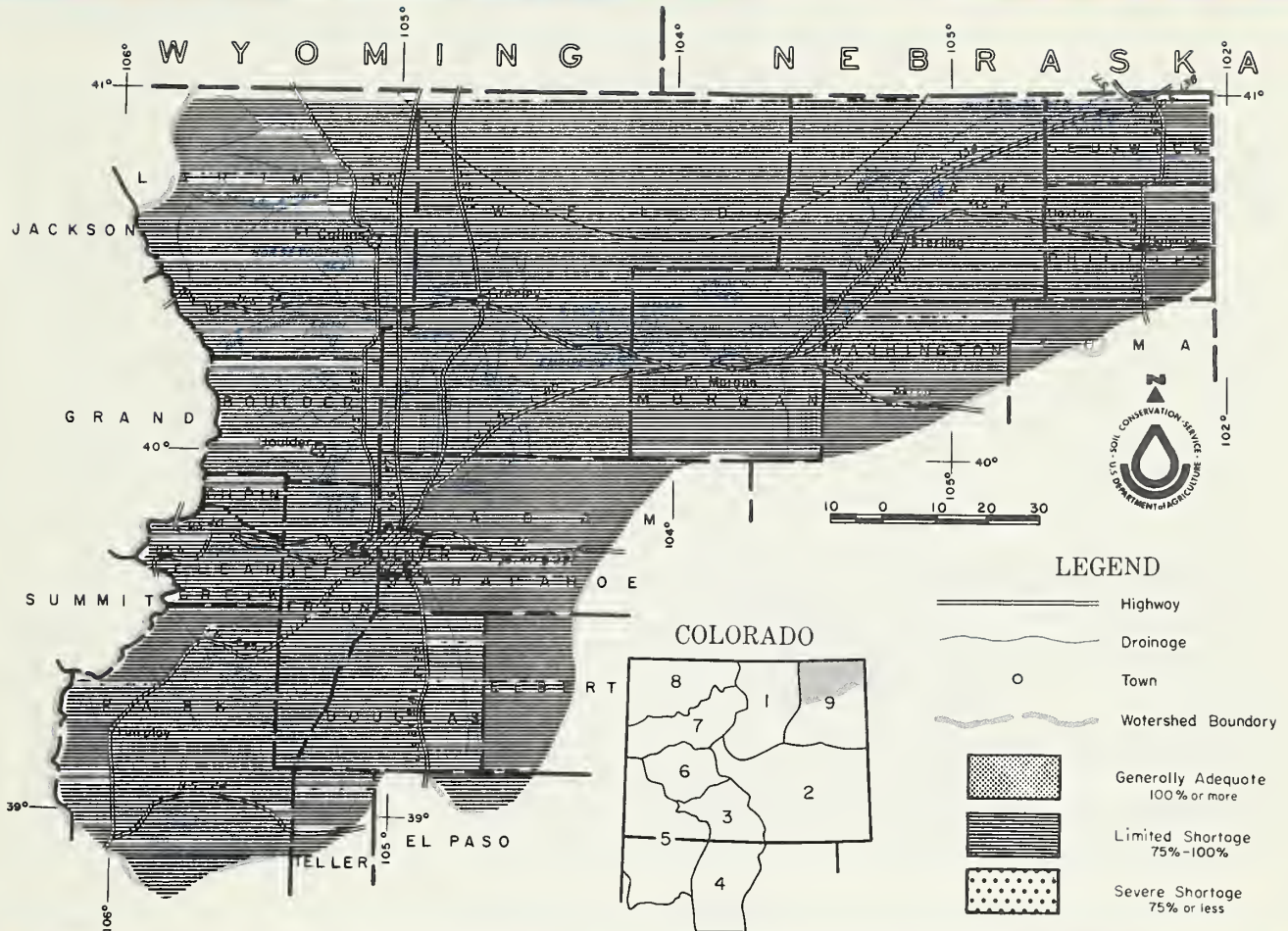


# FIRST CLASS MAIL

# WATER SUPPLY OUTLOOK FOR THE SOIL CONSERVATION DISTRICTS IN THE LOWER SOUTH PLATTE RIVER WATERSHED IN COLORADO

as of  
April 1, 1973

**U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE**  
CSU EXPERIMENT STATION, STATE ENGINEERS OF COLORADO AND NEW MEXICO



## YOUR WATER SUPPLY

SNOWFALL WAS SLIGHTLY BELOW NORMAL DURING MARCH OVER ALL OF THE SOUTH PLATTE BASIN. SOME OF THE BASIN SNOWS WERE DOWN AS MUCH AS 15 PERCENT. WATER SUPPLY FORECASTS WERE GENERALLY LOWERED. SOME LATE SEASON SHORTAGES COULD EXIST. RESERVOIR CARRY-OVER STORAGE IS 112 PERCENT OF NORMAL ON THE LOWER SOUTH PLATTE AND WILL BE AN EXCELLENT SUPPLEMENT. SOIL MOISTURE CONDITIONS IN THE PLAINS IS EXCELLENT. MOUNTAIN SOILS CONTAIN AVERAGE MOISTURE.

This report prepared by

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*The Conservation of Water begins with the Snow Survey*

# STREAMFLOW FORECASTS (1000 Ac. Ft.) Apr-Sept

FORECAST POINT	FORECAST	% of Average	Average +
Big Thompson at Drake (1)	82	82	100
Boulder at Orodell	40	82	49
Cache La Poudre at Canyon Mouth (2)	200	93	215
Clear Cr. at Golden(3)	95	80	119
Saint Vrain at Lyons (4)	55	79	70

# WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period	
	Spring Season	Late Season
South Platte from Greeley to Fort Morgan	Exc	Avg
South Platte from Fort Morgan to Sterling	Exc	Avg
South Platte below Sterling	Exc	Avg

(1) Observed flow plus by-pass to power plants. (2) Observed flow minus trans-basin diversions plus municipal and irrigation diversions. (3) Observed flow minus diversion through August P. Gumlick Tunnel. (4) Observed flow plus change in storage in Price Reservoir.

## SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF	
		Last Year	Average +
Big Thompson	5	83	81
Boulder	3	81	80
Cache La Poudre	8	115	106
Clear Creek	6	89	77
Saint Vrain	3	80	73
South Platte	3	75	86

## SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF:	
		Last Year	Average +
Big Thompson	2	74	96
Boulder	1	86	91
Cache La Poudre	2	86	106
Clear Creek	2	90	102
Saint Vrain	2	77	93
South Platte	2	80	100

## RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage		
		This Year	Last Year	Average +
Carter	108.9	100.1	107.5	81.7
Cheesman	79.0	39.4	79.0	49.0
Eleven Mile	97.8	91.8	78.0	72.1
Empire	37.7	33.6	32.8	29.6
Horsetooth	143.5	105.4	122.9	106.8

## RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage		
		This Year	Last Year	Average +
Jackson	35.4	33.7	34.2	34.0
Julesburg	28.2	23.1	22.7	21.5
Prewitt	32.8	27.9	27.5	16.8
Point of Rocks	70.0	70.6	69.5	58.4
Riverside	57.5	57.9	59.0	49.6

+ 1953-1967 period.

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# APPENDIX I

## SNOW COURSE MEASUREMENTS as of April 1, 1973

SNOW COURSE	CURRENT INFORMATION			PAST RECORD	
	DATE OF SURVEY	SNOW DEPTH (INCHES)	WATER CONTENT (INCHES)	WATER CONTENT (INCHES)	
				LAST YEAR	AVG 53-67
NORTH PLATTE BASIN					
Laramie River					
Deadman Hill	3/30	52	14.3	15.2	16.3
McIntyre	3/29	43	12.3	11.1	10.5
Roach	3/28	61	17.0	17.3	18.2
North Platte River					
Cameron Pass	3/29	79	27.8	28.4	26.5
Columbine Lodge	3/28	52	17.3	24.2	23.5
Northgate	3/29	32	8.5	2.5	6.2
Park View	3/27	34	8.8	7.2	8.6
Willow Cr. Pass (B)	3/27	38	10.5	10.5	12.5
SOUTH PLATTE BASIN					
Boulder Creek					
Baltimore	3/29	27	7.4	5.2	5.9
Boulder Falls	3/22	38	10.0	14.3	13.3
University Camp	3/22	47	14.1	19.3	20.7
Big Thompson River					
Deer Ridge	3/31	19	5.0	1.3	5.0
Hidden Valley	3/31	35	8.4	9.0	11.0
Lake Irene (B)	3/27	58	17.8	20.2	20.7
Long's Peak	3/26	32	7.1	12.3	10.7
Two Mile	3/31	42	11.6	17.3	14.5
Cache La Poudre					
Bennett Creek	3/28	35	8.6	4.7	---
Big South	3/28	9	3.1	0.2	2.4
Cameron Pass	3/29	79	27.8	28.4	26.5
Chambers Lake	3/28	31	9.6	7.4	9.1
Deadman Hill	3/30	52	14.3	15.2	16.3
Hour Glass Lake	3/28	31	7.5	6.1	6.8
Joe Wright	3/29	75	23.6	22.4	---
Lost Lake	3/28	36	10.7	12.6	11.5
Pine Creek	3/30	19	4.3	0.3	1.9
Red Feather	3/30	28	9.1	4.9	7.2
Clear Creek					
Baltimore (B)	3/29	27	7.4	5.2	5.9
Berthoud Falls	3/29	42	11.7	13.7	12.9
Empire	3/29	22	5.6	6.3	7.5
Grizzly Peak (B)	3/29	45	12.2	18.4	17.9
Loveland Lift	3/30	53	15.0	11.6	23.4
Loveland Pass	3/30	43	12.0	16.2	15.4
Saint Vrain River					
Copeland Lake	3/31	18	4.2	3.2	4.4
Ward	3/28	26	5.4	4.6	6.7
Wild Basin	3/31	31	7.2	13.3	11.8
South Platte River					
Como	3/28	33	7.3	7.4	---
Geneva Park	4/2	24	4.0	4.8	3.5
Horseshoe Mt.	3/28	39	8.7	13.7	---
Hoosier Pass	3/30	44	10.5	14.3	12.9
Jefferson Creek	3/29	39	7.6	10.2	9.2
Mosquito	3/29	39	9.0	10.2	---
Trout Creek Pass	3/28	29	6.5	4.3	---
ARKANSAS BASIN					
Arkansas River					
Bigelow Divide	3/27	37	7.2	2.3	5.8
Cooper Hill (B)	3/30	42	9.6	11.9	10.6
East Fork	3/30	30	7.5	8.9	9.6
Four Mile Park	3/29	26	5.0	3.6	4.4
Fremont Pass	3/30	48	13.3	15.8	16.1
Garfield	3/28	56	15.8	12.6	13.2
Hermit Lake	3/26	40	9.8	2.4	---
Monarch Pass	3/28	59	17.9	16.0	17.3
Tennessee Pass	3/28	38	8.2	10.6	10.1
Twin Lakes Tunnel	3/29	39	9.9	12.6	10.7
Westcliffe	3/26	34	8.5	2.8	5.4

SNOW COURSE	CURRENT INFORMATION			PAST RECORD	
	DATE OF SURVEY	SNOW DEPTH (INCHES)	WATER CONTENT (INCHES)	WATER CONTENT (INCHES)	
				LAST YEAR	AVG. 53-67
<u>Cucharas River</u>					
Blue Lakes	3/28	33	6.2	0.6	2.9
Cucharas Pass	3/28	52	10.0	1.2	---
LaVeta Pass (B)	3/28	56	13.2	2.6	7.3
<u>Purgatorie River</u>					
Bourbon	3/28	49	9.3	3.4	7.1
<b>RIO GRANDE BASIN-COLO</b>					
<u>Alamosa River</u>					
Silver Lakes	3/27	43	11.4	0.1	5.5
Summitville	3/28	87	26.6	17.8	18.1
<u>Conejos River</u>					
Cumbres	3/31	80	27.3	8.0	18.6
LaManga	3/31	83	24.2	11.9	---
Platoro	3/28	72	22.0	9.0	16.6
River Springs	3/29	34	9.2	0.0	4.8
<u>Culebra River</u>					
Brown Cabin	3/28	40	9.0	1.5	---
Cottonwood (B)	NS			---	---
Culebra	4/2	61	15.4	7.1	8.4
LaVeta Pass (B)	3/28	56	13.2	2.6	7.3
Trinchera (B)	3/31	62	13.5	7.6	---
<u>Rio Grande</u>					
Cochetopa Pass	3/29	33	7.6	6.3	5.1
Grayback	3/28	70	21.7	10.1	---
Hiway	3/28	96	33.0	18.6	26.0
Lake Humphrey	3/29	47	10.7	3.7	5.5
Love Lake	3/30	57	15.2	8.0	---
Pass Creek	3/28	56	17.8	4.4	11.1
Pool Table	3/29	43	8.7	5.4	5.9
Porcupine	3/30	51	12.0	11.0	10.1
Santa Maria	3/29	32	6.6	0.3	3.7
Upper Rio Grande	3/29	56	13.8	6.0	6.8
Wolf Creek Pass	3/28	100	35.1	16.5	27.0
Wolf Cr. Summit (B)	3/28	115	39.7	24.7	28.3
<b>RIO GRANDE BASIN - NM</b>					
<u>Pecos River</u>					
Panchuela	3/29	33	6.9	0.0	1.3
<u>Rio Chama</u>					
Bateman	3/30	66	17.8	6.7	11.4
Capulin Peak	3/26	36	9.0	0.0	4.0
Chama Divide	3/30	23	5.6	0.0	1.4
Chamita	3/31	44	12.7	1.3	7.5
<u>Rio Grande</u>					
Aspen Grove	3/28	37	10.3	1.1	3.7
Big Tesuque	3/28	44	12.7	0.0	4.2
Blue Bird Mesa	3/29	40	9.5	0.1	3.6
Cordova	3/30	75	17.4	6.4	10.0
Elk Cabin	3/26	29	7.8	0.0	2.1
Hopewell	3/30	76	22.1	7.8	---
LaCueva	3/28	42	10.7	---	---
Pajarito Peak	3/26	10	2.8	0.0	0.3
Payrole	3/28	48	12.2	1.5	6.2
Quemazon	4/3	76	20.7	5.2	8.2
Rio En Medio	3/28	57	16.7	1.5	7.7
Sandoval	3/30	59	14.6	0.0	4.5
Taos Canyon	3/29	37	8.4	1.1	3.5
Teakettle	3/27	46	13.0		
Tres Ritos	3/28	40	11.1	0.5	4.2
<u>Rio Hondo</u>					
Twinning	3/29	50	11.4	4.4	---
<u>Red River</u>					
Hematite Park (B)	3/28	27	7.1	0.6	3.5
Red River	3/28	31	8.6	1.9	5.5

NOTE: NS - No Survey  
(B) - On Adjacent Drainage

# APPENDIX I

## SNOW COURSE MEASUREMENTS as of April 1, 1973

SNOW COURSE	CURRENT INFORMATION			PAST RECORD	
	DATE OF SURVEY	SNOW DEPTH (INCHES)	WATER CONTENT (INCHES)	WATER CONTENT (INCHES)	
				LAST YEAR	AVG. 53-67
SAN JUAN-DOLORES BASIN					
<u>Animas River</u>					
Cascade	3/29	64	19.1	3.6	10.8
Lemon	3/30	57	15.7	0.0	---
Mineral Creek	3/29	65	19.9	11.5	13.3
Molas Lake	3/29	57	16.3	4.5	12.6
Purgatory				16.7	---
Red Mt. Pass (B)	3/29	103	35.1	29.5	30.1
Silverton Sub-Sta.	3/29	44	13.0	0.0	5.1
Spud Mountain	3/29	100	30.8	17.4	23.1
<u>Dolores River</u>					
Lizzard Head	3/29	72	22.4	12.4	16.0
Lone Cone	3/30	61	18.9	10.7	---
Rico	3/29	46	13.1	0.0	5.4
Telluride	3/29	42	10.6	1.6	5.7
Trout Lake	3/29	67	19.5	7.7	13.2
<u>San Juan River</u>					
Chama Divide (B)	3/30	23	5.6	0.0	1.4
Chamita (B)	3/31	44	13.0	1.3	7.5
Upper San Juan	3/28	111	40.3	12.6	30.8
Wolf Cr. Pass (B)	3/28	100	35.1	16.5	27.0
Wolf Cr. Summit	3/28	115	39.7	24.7	28.3
GUNNISON BASIN					
<u>Gunnison River</u>					
Alexander Lake	3/29	78	26.5	18.7	21.4
Blue Mesa	3/29	33	7.6	3.2	7.9
Butte	3/30	48	13.4	13.4	---
Cochetopa Pass (B)	3/29	33	7.6	6.3	5.1
Crested Butte	3/30	49	14.1	11.2	13.3
Keystone	3/27	59	19.8	17.9	19.7
Lake City	3/28	37	7.9	7.2	7.7
Mesa Lakes (B)	3/29	65	20.4	11.6	17.5
McClure Pass	3/28	54	19.2	10.0	14.6
Park Cone	3/27	33	8.5	10.4	10.9
Park Reservoir	3/30	89	27.3	19.8	23.6
Porphyry Creek	3/28	62	18.7	14.4	16.9
Tomichi	3/28	48	14.6	12.7	12.2
<u>Surface Creek</u>					
Alexander Lake	3/29	78	26.5	18.7	21.4
Mesa Lakes (B)	3/29	65	20.4	11.6	17.5
Park Reservoir	3/30	89	27.3	19.8	23.6
<u>Uncompahgre River</u>					
Ironton Park	3/29	55	16.9	5.3	17.9
Red Mountain Pass	3/29	103	35.1	29.5	30.1
Telluride (B)	3/29	42	10.6	1.6	5.7
COLORADO BASIN					
<u>Blue River</u>					
Blue River	3/30	33	8.5	8.7	8.5
Fremont Pass	3/30	48	13.3	15.8	16.1
Frisco	3/29	25	6.3	6.8	7.5
Grizzly Peak	3/29	45	12.2	18.4	17.9
Hoosier Pass (B)	3/30	44	10.5	14.3	12.9
Shrine Pass	3/29	53	14.7	18.8	17.4
Snake River	3/29	20	5.2	5.4	7.6
Summit Ranch	3/28	25	6.1	8.4	7.1

SNOW COURSE	CURRENT INFORMATION			PAST RECORD	
	DATE OF SURVEY	SNOW DEPTH (INCHES)	WATER CONTENT (INCHES)	WATER CONTENT (INCHES)	
				LAST YEAR	AVG 53-67
Colorado River					
Arrow	3/28	38	12.6	14.5	11.8
Berthoud Pass	3/28	49	14.4	19.3	14.5
Berthoud Summit	3/29	56	16.3	19.0	19.3
Cooper Hill	3/30	42	9.6	11.9	10.6
Fiddler Gulch	3/28	51	11.3	12.4	15.1
Glenmar Ranch	3/27	29	7.8	7.5	7.9
Gore Pass	3/28	32	9.3	10.3	10.0
Grand Lake	3/28	33	7.5	8.0	8.2
Lake Irene	3/27	58	17.8	20.2	20.7
Lapland	3/28	32	8.3	12.4	9.9
Lulu	3/30	55	16.4	19.5	17.0
Lynx Pass	3/28	41	12.1	11.8	12.0
McKenzie Gulch	3/28	27	6.2	4.8	---
Middle Fork	3/26	32	9.4	8.8	9.1
Milner	3/27	39	10.6	12.1	13.3
North Inlet	3/29	30	7.9	7.4	8.7
Pando	3/30	32	8.8	10.2	10.4
Phantom Valley	3/27	33	9.3	7.3	10.4
Ranch Creek	3/28	35	9.3	10.2	9.4
Tennessee Pass (B)	3/28	38	8.2	10.6	10.1
Vail Pass	3/29	47	14.0	17.3	17.1
Vasquez	3/29	40	10.6	15.1	12.4
Roaring Fork River					
Aspen	3/27	54	17.7	16.7	16.4
Chapman	3/28	49	13.4	17.2	---
Independence Pass	3/29	53	14.3	15.1	17.7
Ivanhoe	3/29	57	18.0	18.9	17.9
Kiln	3/29	44	10.5	14.5	---
Last Chance	3/29	38	10.4	13.5	---
Lift	3/27	55	17.0	14.4	19.0
McClure Pass	3/28	54	19.2	10.0	14.6
Nast	3/29	25	6.3	4.9	5.3
North Lost Trail	3/28	46	16.2	9.7	14.1
Williams Fork River					
Glenmar Ranch	3/27	29	7.8	7.5	7.9
Jones Pass	3/28	49	14.4	15.3	---
Middle Fork	3/26	32	9.4	8.8	9.1
Willow Creek					
Granby	3/27	21	4.8	7.8	7.5
Willow Cr. Pass	3/27	38	10.5	10.5	12.5
Plateau Creek					
Mesa Lakes	3/29	65	20.4	11.6	17.5
Park Reservoir	3/30	89	27.3	19.8	23.6
Trickle Divide	3/30	94	29.0	23.5	25.2
YAMPA BASIN					
Elk River					
Clark	3/30	35	9.8	9.1	10.0
Elk River	3/30	47	14.7	16.3	16.8
Hahn's Peak	3/30	39	12.2	12.3	12.9
White River					
Burro Mountain	3/29	57	18.9	12.7	17.0
Rio Blanco	3/28	42	12.6	13.5	15.8
Yampa River					
Bear River	3/29	41	9.5	10.4	11.1
Buffalo Pass	3/27	100	36.3	----	---
Columbine (B)	3/28	52	17.3	24.2	23.5
Dry Lake	3/27	57	19.0	19.0	19.9
Lynx Pass (B)	3/28	41	12.1	11.8	12.0
Rabbit Ears	3/28	71	22.8	25.4	25.7
Yampa View	3/28	45	14.7	12.0	14.3
Croshe	3/29	46	12.6	---	---

NOTE: NS - No Survey  
(B) - On Adjacent Drainage

## APPENDIX II

### SOIL MOISTURE MEASUREMENTS as of April 1, 1973

STATION	DATE OF SURVEY	CAPACITY (INCHES)	THIS YEAR	LAST YEAR	AVG. ALL DATA
NORTH PLATTE BASIN					
<u>North Platte River</u>					
Muddy Pass	3/28/73	11.1	7.9	8.9	6.5
Willow Pass	3/27/73	9.5	7.2	7.7	6.7
SOUTH PLATTE BASIN					
<u>Boulder Creek</u>					
Alpine Camp	3/30/73	6.9	3.2	3.7	3.5
<u>Big Thompson River</u>					
Beaver Dam	3/30/73	7.1	3.3	4.7	3.5
Guard Station	3/30/73	6.9	3.4	4.4	3.5
Two Mile	3/30/73	4.9	4.8	NS	4.9
<u>Clear Creek</u>					
Clear Creek	3/29/73	9.5	5.2	6.5	5.4
Hoop Creek	3/29/73	4.9	3.1	2.7	2.7
<u>Cache La Poudre River</u>					
Feather	3/30/73	10.1	4.8	7.0	4.4
Laramie Road	3/28/73	12.4	7.1	6.8	6.8
<u>South Platte River</u>					
Hoosier Pass	3/30/73	7.8	4.4	4.8	4.4
Kenosha Pass	3/29/73	4.4	2.2	3.4	2.2
ARKANSAS BASIN					
<u>Arkansas River</u>					
Garfield	3/28/73	6.7	4.6	3.9	3.5
Leadville	3/30/73	7.8	3.6	3.1	3.6
Twin Lakes Tunnel	3/30/73	4.5	2.5	1.5	2.3
RIO GRANDE BASIN - COLORADO					
<u>Conejos River</u>					
Mogote	3/26/73	10.7	4.8	5.4	6.0
<u>Rio Grande</u>					
Bristol View	3/30/73	6.1	4.9	5.7	3.7
LaVeta Pass	3/26/73	11.9	8.6	7.6	8.7
RIO GRANDE BASIN - NEW MEXICO					
<u>Rio Chama</u>					
Bateman	NR	6.7	---	4.4	3.1
Chamita	3/31	8.0	5.0	5.2	4.6
<u>Rio Grande</u>					
Aqua Piedra	NR	7.2	---	4.8	4.5
Big Tesuque	NR	3.7	---	2.6	2.1
Rio En Medio	NR	3.5	---	2.4	1.3
Taos Canyon	NR	3.3	---	2.7	2.6
<u>Red River</u>					
Red Summit	NR	4.9	---	1.6	1.8



## APPENDIX II

SOIL MOISTURE MEASUREMENTS as of April 1, 1973

STATION	DATE OF SURVEY	CAPACITY (INCHES)	THIS YEAR	LAST YEAR	AVG. ALL DATA
ANIMAS - SAN JUAN BASINS					
<u>Animas River</u>					
Cascade	3/29/73	9.1	5.1	5.3	6.7
Mineral Creek	3/29/73	5.7	3.0	3.1	3.3
Molas Lake	3/29/73	9.4	5.7	3.7	4.3
<u>Dolores River</u>					
Dolores	3/29/73	19.6	18.2	NS	8.9
Lizzard Head	3/29/73	11.8	2.5	4.4	5.7
Rico	3/29/73	13.8	8.2	10.5	8.9
GUNNISON BASIN					
<u>Gunnison River</u>					
King	3/28/73	3.3	2.3	2.1	1.9
COLORADO BASIN (Mainstem)					
<u>Blue River</u>					
Blue River	3/30/73	4.2	2.3	2.6	2.5
<u>Colorado River</u>					
Berthoud Pass	3/29/73	3.9	3.2	2.5	2.6
Gore	3/28/73	4.9	2.7	3.1	2.4
Grand Mesa	3/30/73	12.5	11.6	9.3	9.6
Ranch Creek	3/28/73	8.7	5.7	5.0	5.3
Vail	3/29/73	12.3	8.0	9.0	8.5
<u>Roaring Fork River</u>					
Placita	3/28/73	9.3	7.7	5.8	6.6
YAMPA BASIN					
<u>Yampa River</u>					
Hahn's Peak	3/30/73	13.1	11.7	13.0	7.5

# LIST of COOPERATORS

The following organizations cooperate in snow surveys for the Colorado, Platte, Arkansas and Rio Grande watersheds. Many other organizations and individuals furnish valuable information for the snow survey reports. Their cooperation is gratefully acknowledged.

## STATE

Colorado State Engineer  
New Mexico State Engineer  
Nebraska State Engineer  
Colorado State University Experiment Station  
Rocky Mountain Forest and Range Experiment Station

## FEDERAL

Department of Agriculture

Forest Service  
Soil Conservation Service

Department of Interior

Bureau of Reclamation  
Geological Survey  
National Park Service  
Indian Service

Department of Commerce

NOAA, National Weather Service

Defence Department

Army Engineer Corps

Atomic Energy Commission

## INVESTOR OWNED UTILITIES

Colorado Public Service Company  
Public Service Company of New Mexico

## MUNICIPALITIES

City of Denver	City of Greeley
City of Boulder	City of Fort Collins

## WATER USERS ORGANIZATIONS

Arkansas Valley Ditch Association  
Colorado River Water Conservation District

## IRRIGATION PROJECTS

Farmers Reservoir and Irrigation Company  
San Luis Valley Irrigation District  
Santa Maria Reservoir Company  
Costilla Land Company  
Uncompahgre Valley Water Users' Association  
Twin Lakes Reservoir and Canal Company  
Trinchera Irrigation Co.

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